Amendments to the Claims:

This listing of claims will replace the listing of claims in the application.

LISTING OF CLAIMS:

1. (currently amended) A ~~Method~~ method of detecting from a vehicle variations in path~~, in particular a bend or straight line,~~ on a road ~~comprising~~ having a surface ~~(1)~~ and road edges ~~(2, 3), characterised in that it comprises the following operations~~ comprising the steps of:

- taking an image of a road scene unfolding in front of the vehicle and at least partly illuminated by the vehicle,
- determining, for each pixel in the image a light decrease gradient,
- analysing these light gradients and determining an image of the road edges,
- mathematically discriminating the gradients from the image of the road edges, and
- analyzing this discrimination and determining ~~the~~ an angle of the bend.

2. (currently amended) A ~~Method~~ method ~~of detecting a bend~~ according to Claim 1, wherein ~~characterised in that~~ the gradient of an elementary image part corresponds to a decrease vector of ~~the~~ light formed between adjacent pixels.

3. (currently amended)) A ~~Method~~ method ~~of detecting a bend~~ according to Claim 2, wherein ~~characterised in that~~ the analysis of the decrease gradients comprises ~~consists of~~ a thresholding of the decrease vectors and an elimination of the decrease vectors outside the threshold.

4. (currently amended) A method ~~Method of detecting a bend~~ according to ~~either one of Claims 2 and 3, characterised in that~~ Claim 2 wherein the mathematical ~~discretisation consists of~~ discrimination comprises counting the elementary image parts having a vector oriented in one direction and the elementary image parts have a decrease vector oriented in the opposite direction.

5. (currently amended) A ~~Method of detecting a bend~~ method according to Claim 4, ~~characterised in that~~ wherein the counting of the elementary image parts is carried out pixel column by pixel column, or by groups of pixel columns.

6. (currently amended) A ~~Method of detecting a bend~~ method according to ~~any one of Claims 1 to 5, characterised in that~~ Claim 1, wherein the analysis of the discrimination is carried out by a neural network.

7. (currently amended) A ~~Method of detecting a bend~~ method according to Claim 6, ~~characterised in that~~ wherein the neural network has previously learnt geometries of bends and corresponding mathematical discriminations.

8. (currently amended) A system ~~System~~ for detecting a bend ~~on~~ in a road from a vehicle implementing the method according to ~~any one of Claims 1 to 7, characterised in that it comprises~~ Claim 1, comprising a camera ~~(10)~~ mounted in the vehicle, an image processing unit ~~(20)~~ and a neural network ~~(21)~~.

9. (currently amended) A system ~~System~~ of detecting a bend according to Claim 8, ~~characterised in that~~ wherein the neural network is integrated in the image processing unit.

10. (currently amended) A system ~~System~~ for detecting a bend according to ~~either one of Claims 8 and 9, characterised in that it~~ Claim 8 that is connected to a vehicle headlight, movable ~~(30)~~ or fixed and modulated for intensity.

11. (new) A method Claim 3 wherein the mathematical discrimination comprises counting the elementary image parts having a vector oriented in one direction and the elementary image parts have a decrease vector oriented in the opposite direction.

12. (new) A method according to Claim 2, wherein the analysis of the discrimination is carried out by a neural network.

13. (new) A method according to Claim 3, wherein the analysis of the discrimination is carried out by a neural network.

14. (new) A method according to Claim 4, wherein the analysis of the discrimination is carried out by a neural network.

15. (new) A method according to Claim 5, wherein the analysis of the discrimination is carried out by a neural network.

16. (new) A method according to Claim 1, wherein the neural network has previously learnt geometries of bends and corresponding mathematical discriminations.

17. (new) A method according to Claim 2, wherein the neural network has previously learnt geometries of bends and corresponding mathematical discriminations.

18. (new) A method according to Claim 3, wherein the neural network has previously learnt geometries of bends and corresponding mathematical discriminations.

19. (new) A method according to Claim 4, wherein the neural network has previously learnt geometries of bends and corresponding mathematical discriminations.

20. (new) A method according to Claim 5, wherein the neural network has previously learnt geometries of bends and corresponding mathematical discriminations.

21. (new) A system for detecting a bend in a road from a vehicle implementing the method according to Claim 2 comprising a camera mounted in the vehicle, an image processing unit and a neural network.

22. (new) A system for detecting a bend in a road from a vehicle implementing the method according to Claim 3 comprising a camera mounted in the vehicle, an image processing unit and a neural network.

23. (new) A system for detecting a bend in a road from a vehicle implementing the method according to Claim 4 comprising a camera mounted in the vehicle, an image processing unit and a neural network.

24. (new) A system for detecting a bend in a road from a vehicle implementing the method according to Claim 5 comprising a camera mounted in the vehicle, an image processing unit and a neural network.

25. (new) A system for detecting a bend in a road from a vehicle implementing the method according to Claim 6 comprising a camera mounted in the vehicle, an image processing unit and a neural network.

26. (new) A system for detecting a bend in a road from a vehicle implementing the method according to Claim 7 comprising a camera mounted in the vehicle, an image processing unit and a neural network.

27. (new) A system for detecting a bend according to Claim 9 that is connected to a vehicle headlight, movable or fixed and modulated for intensity.